

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Forest Insect & Disease Management  
P.O. Box 5895, Asheville, NC 28803

Report No. 79-1-3

3400  
February 16, 1979



Mr. Donald Rogers  
Edwards State Forest Nursery  
Route 10, Box 1  
Morganton, NC 28655

Dear Don:

On February 2, 1979, Bob Anderson, Bill Hoffard and Vickie Fisher met with you to examine a potential walnut problem. The following summarizes their findings.

Area 1 - Grazed Site

The trees on this site were affected by a variety of factors. The site at best was marginal, severe erosion had occurred, cattle and equipment compaction was common, many of the roots were exposed and damaged, some trees were on very dry areas and others had their roots in the creek. Many of the trees had frost crack, nectria canker, sap sucker and mechanical damage. As a result, the lower one-half of the crowns were dying. The branch death which was only noted in the past 2 years may be related to the past 2 years of drought and stress.

Management Consideration - Area 1

This area is probably beyond help. The trees with severe frost crack or nectria should be removed or managed for nut production. The remaining trees should be harvested as soon as their losses exceed growth. Frost crack, root diseases, cankers and other pests will always be able to out compete walnut on this site and prohibit the production of high quality wood.

Area 2 - Ungrazed Land by Creek

The prime walnut site is in excellent condition. Other than nectria canker, these trees were relatively disease-free. One pocket of two dead trees which seemed to be caused by Polyporus obtusus was located. This fungus is reported as a decay fungus, which requires a wound to get into the tree, with no information on its ability as a root rot fungus.

Management Consideration - Area 2

The existing trees (all species) with nectria canker should be removed

unless the canker is located so that a high value log can be produced above or below the canker. This is possible because necrotia normally is not associated with decay. Care should be taken in removing these trees to not wound the remaining trees since necrotia can get in through wounds. One of the large roots we brought back from the windthrown tree had mechanical damage which was connected to the root decay. This localized area was below a rock outcrop and was probably wet during part of the year, which may have increased the root rot problem. Removal of these affected trees and one older slow-growing walnut tree about 30 feet from the pocked should solve this problem. This root rot is not viewed as a threat to any of the remaining walnut.

### Area 3 - Grazed Upland Site

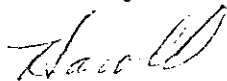
Once again, this was a repeat of Area 1, but the damage was less severe.

### Management Consideration - Area 3

Manage the trees primarily for nut production and harvest when economic loss exceeds gain.

Overall, the problems noted were trees on marginal sites with a lot of added stress factors. None of the trees observed during the visit had any indications of a blight and we would not recommend any changes in the proposed planting because of insects or diseases.

Sincerely,



HAROLD W. FLAKE  
Field Office Representative

cc: Ralph Winkworth  
Coleman Doggett  
Toko  
Anderson